

Marines FROM THE TRENCHES

In this edition, *Marines* looks at new technologies and the never ending desire of Marines to sharpen their individual edges. A sampling of stories include: New air defense weaponry being added to the workhorse of the Corps, the CH-53 Super Stallion; Young lieutenants honing the skills required to lead Marines into battle at The Basic School; Four men following in their fathers' footsteps, testing their mettle and earning the title "Marine"; Hawaii Marines testing their abilities on the live fire ranges of Australia's Shoalwater area; Marine for Life and how the adage "once a Marine, always a Marine" is exemplified in the lives of hometown links across America who assist Marines transitioning to their adjustment to the 1st CivDiv; and much, much more *From the Trenches*.

New Weapon Adds 'Umph' to the Corps' CH-53s

By Sgt. Matthew B. Roberson
CAMP LEMONIER, Djibouti



> Sgt. Richard A. Dorsett, HMH-461 aviation ordnanceman, demonstrates the operational abilities of the Ramp Mounted Weapon System here. The RMWS provides CH-53 Super Stallion Helicopters with a much needed defensive system providing 180 degrees field of fire from the rear of the aircraft.

Photo by Cpl. Eric C. Ely



< Sgt. Ron Strzalkowski, HMH 461 air crewman, engages multiple targets during the first live-fire exercise with the Ramp Mounted Weapon System (RMWS) here. The RMWS provides CH-53 Super Stallion Helicopters with a much needed defensive system providing 180 degrees field of fire from the rear of the aircraft.

Photo by: Sgt. Matthew B. Roberson

The first squadron to employ the new Ramp Mounted Weapon System added the machine guns to its CH-53 Super Stallions and increased the helicopters' rear areas of defensive fire to 180 degrees – more than doubling the bird's field of fire from its two door weapons alone.

Marine Heavy Helicopter Squadron 461, known as the Iron Horses, evaluated the Fabrique Nationale M3M .50-caliber machine gun, modified into a weapon system specific for Marine Corps applications, said Maj. Andrew Butler, Marine Corps War Fighting Lab M3M project coordinator.

The RMWS is also being viewed as a possible defensive weapon system for several assault support aircraft in the Marine Corps. HMH-461 is the first squadron to implement the system in real-world operations.

The ramp system is so new it hasn't even had the time to be completely evaluated, said Butler. "HMH-461 is the first squadron to use the system, and we're really excited to have the RMWS out here providing (heavy helicopter squadrons) with an additional capability."

Because of the various missions the Super Stallion has been called upon to

perform in the past, RMWS is a much-needed capability, said Maj. Archibald M. Mclellan, aircraft maintenance officer for the Iron Horses.

Over the last 10 years there have been several instances where the RMWS could have directly benefited Marines, said Mclellan, noting that many of the missions CH-53s have been used for took place across long-ranges, over the horizon – sometimes without escorts.

"During the O'Grady rescue back in September of '95, (the Marines) were able to take Cobras with them" Mclellan said. "As we found out during that mission, (lack of) a rear-mounted suppressive fire capability could have cost them significantly. Fortunately, the missiles shot at them didn't impact the aircraft."

Marines were cargo strapped to the ramp of the aircraft with rifles and medium machine guns to provide a rear suppressive fire capability during Operation Enduring Freedom in Afghanistan.

The RMWS would have been ideal in these situations and would have served as a valuable defensive weapon, said Mclellan.

Testing of the M3M began in 2001 and the majority of the features on the machine gun are Marine Corps specific, such as the soft mount and 300-round ammo box, said Butler. The soft mount reduces recoil and increases first round burst accuracy. The 300-round magazine is light enough to allow one Marine to lift and reload but still have maximum firepower.

Other advantages to the M3M over the current M2 machine gun include: improvement in the rate of fire (1,100 rounds per minute vs. 550), safety (open breech; eliminates cook off), improved barrel life (10,000 rounds vs. current 3,000), reduced recoil (1/3 of standard .50 caliber weapons), accuracy, lethality, maintainability and reliability over the current fielded weapons. **M**

	M2 .50 Caliber Machine Gun	M3M .50 Caliber Machine Gun
Builder	Saco Defense	Fabrique Nationale
Weight	128 pounds (58 kilograms)	79.9 lbs
Maximum Effective Range	2,000 meters w/ tripod mount	1,850 meters
Maximum Range	4.22 miles (6.8 kilometers)	4.03 miles (6.5 kilometers)
Rate of Fire	550 rounds per minute	1,100 rounds per minute
Barrel Life	3,000 rounds	10,000 rounds

"The rear defense capability of the Stallion has gone from zero to 180 degrees."

Training the Trainers

Lieutenants learn lessons of small unit leaders

Story by Cpl. Jeff Correa
MARINE CORPS BASE QUANTICO, Va.



▲ 2nd Lt. Akin Perry dashes forward holding an M-203 grenade launcher at the alert carry during an exercise designed to teach the principles of fire and movement.

Photo by Cpl. Jeff Correa

The Marines of 1st, 3rd, and 5th platoons from Echo Company at The Basic School engaged in a daylong live-fire exercise at Range 5 Sept. 24.

The objective was to teach second lieutenants the basic principles of fire and movement: the process by which fire teams and squads provide cover fire while other fire teams or squads advance toward the enemy or assault an enemy position.

"This is a train-the-trainer type of evolution designed to effectively introduce the basic principles of ground combat at the small-unit level," said Capt. Matthew R. Warnick, warfighting instructor at TBS.

Close to 200 men and women, camped at the range, assembled in the frigid predawn bearing flak jackets, Kevlar helmets and weapons.

"I have always looked forward to this type of training because it provides hands-on experience that really tests your leadership and points out your strengths and weaknesses," said 2nd Lt. Kylee Best, 3rd Platoon commander.

The Marines divided into fire teams, with M-16A2 service rifles; M-203 grenade launchers that use high-explosive, dual-purpose 40 mm grenades; and M-249 5.56 mm squad automatic weapons. Warfighting instructors demonstrated the capabilities of each weapon and how to employ them effectively as a team.

"The training conducted here today will expose lieutenants to the rigors of operating jointly in war as well as in military operations other than war scenarios," said Capt. Jay Lappe, an Iraq veteran. "They learn to function efficiently not as individuals, but as a strong team."

TBS requires squads to accomplish a single "dry run" rehearsal with no live rounds, and two "wet" rehearsals with

live rounds. However, between the dry-run and wet-run rehearsals, instructors critique the students' performances and educated them on proper technique, awareness and safety. Specifics discussed during the critique sessions include lateral dispersion, depth, fire discipline and unsafe weapons conditions.

The attack began with a single squad forming a line that spread evenly across and facing the range while holding their respective weapons at the alert carry. Subsequently, a thunderous explosion prepped by combat engineers cued the squad's forward advance.

"We went through all the obstacles and tried to the best of our ability to maintain focus on working as a team throughout the course," said 2nd

➤ Echo Co. gathers at Range 5 to listen to the safety brief conducted by Capt. Matthew Warnick, warfighting instructor.

Photo by Cpl. Jeff Correa



◀ 2nd Lt. William Mickinnon listens to a safety brief with the rest of E Company on Range 5 where TBS students engaged in a daylong live-fire exercise Sept. 24.

Photo by Cpl. Jeff Correa

Lt. Clyde Scott, 3rd squad leader, 1st Platoon.

"This is a well-rounded course that mirrors the kinds of warfare scenarios that may arise for them in the future," said 1st Lt. Jacob Q. Robinson, warfighting instructor.

Strong teamwork and the principles

of fire and movement are tremendous pillars that help build a good base on which these future leaders will rely to teach Marines the skills of combat effectiveness. The training also reinforces another basic premise of the Corps that still holds true – every Marine a rifleman. **M**



"This type of training...provides hands-on experience that really tests your leadership."



Never has a Marine Corps infantryman had the ability to take out a battle tank with a lightweight weapon system until now.

Despite its light weight, slightly under 22 pounds, the fire-and-forget MK40 Predator maintains a heavy mission -- engaging and defeating battle tanks equipped with explosive reactive armor. "There's no other weapon in the world that does what this does," said Mike Woodson, project officer for the Predator at the Marine Corps Systems Command. "There are other antitank weapons out there, but they are crew-served and significantly heavier."

Marines from 2nd Battalion, 3rd Marine Regiment completed a three-day course in the operation of the new short-range assault weapon at the 3rd Marine Regiment indoor simulated marksmanship trainer.

The MK40 fires Predator ammunition, in the form of a missile, that attacks the vulnerable top of a target by flying over and firing an explosive warhead down into the target.

"It uses laser and magnetic fields to find the center of the target," said Joel Snively, an instructor for the course. "It's not going into the side of the tank that is protected by armor. It hits the top of the tank; the most vulnerable part."

The Marines of 2/3 performed the final stage of the MK40's first-article testing in July at the Naval Air Warfare Center, China Lake, Calif. They prepared for this opportunity by spending the first day of training in the marksmanship trainer classroom and memorizing the weapon's characteristics and operational requirements. Practical application filled the last two days, as the leather-necks fired computerized scenarios and practiced on the tracking and firing systems at an outdoor trainer.

"We want to build up their knowledge of the Predator so when it comes time to deploy they can engage their enemy effectively without hesitation," said Snively. "It's truly a simple system to employ, but these Marines will obviously

2/3 Tests New Predator for Corps Applicability

By Cpl. Jessica M. Mills
MARINE CORPS BASE HAWAII, KANEOHE BAY, Hawaii



▲ Lance Cpl. David Terryah, a rifleman with Fox Company, 2nd Battalion, 3rd Marine Regiment, aims a Predator/Short Range Assault Weapon MK40 at a building during operational application training.

Photo by Cpl. Jessica M. Mills

need basic Marine skills and the knowledge we give them to understand it."

The final phase of testing, an operational test shoot of 30 weapons, was completed in July. The Marines of 2/3 conducted a series of tactical scenarios that lead up to the test itself, firing three times per day.

With testing completed successfully the Corps will accept its first Predator shipment in late November 2003 with the total inventory of Predator ammunition delivered by late 2004. Initial training will begin in the spring of 2004 for active duty forces with training for reserve units soon to follow. **M**

Sandy Carter has hired two employees, thanks to Marine For Life, and she's glad there's a program that allows employers to recruit from the ranks of those leaving the Marine Corps.

"The program works out very well for me," said Carter, who works for Allied Security in the Denver area. Carter considers Marines a perfect fit for her line of work. A Marine, Carter said, is "somebody I would prefer to hire."

Marine For Life helps transitioning Marines getting settled in civilian life find jobs, decide on careers, make educational choices and look for homes.

"For those who have served honorably, our debt of gratitude extends well beyond their last day of active service," then-Commandant Gen. James L. Jones said.

"Taking care of our own," means more than helping Marines prepare to leave active service, Gen. Jones said. It also means sticking with them after their departure and helping them tap into networks of people, businesses and organizations.

Marine For Life has more than 70 hometown links across the nation, and that number is projected to grow rapidly in the next year. A hometown link is a reserve Marine who assembles a network of available resources to help Marines prepare for civilian life.

For example, a Marine leaving active duty can go to www.MarineForLife.com and type in the zip code for his new home. That brings up helpful information on the city, town, or region.

The program is picking up speed and its Web site is growing. To improve the Web site and fill in gaps with personal assistance, each hometown link location has one or more Marine reservist working to enter data related to their community. As the data increases, more and more Marines looking to begin their new lives can take full advantage of Marine For Life online.

For now, Marines leaving the Corps can use the Web site, but are encouraged to contact their hometown link for additional help.

In Augusta, Maine, Lt. Shaun Bennett serves as the hometown link for the whole state.

"Since I'm covering such a large area, I am finding resources in the population

Marine For Life Offers 'Safety Net' to Transitioning Marines

By Sgt. John Lawson III
HEADQUARTERS MARINE CORPS, Washington

hubs, like Portland, Lewiston, and Bangor, and working outwards from them," Bennett said. "When I make contact with a Marine, I establish where they're going and what they're hoping to do once they get home. After that I focus my efforts around those criteria."

Cpl. Eugene Pray in New Portland, Maine, left active duty in September. Pray has been searching for a job with the federal government, and he said he has been impressed by Bennett's knowledge of the job scene. "Any questions that I've had, he's answered," Pray said.

Though Pray has specific goals for his future, not everyone does. Marine

For Life can be especially helpful when Marines aren't sure what their next step should be, said Maj. John "Buck" Nelson, a hometown link in New York.

"It's pretty easy to help people who know what they want," Nelson said. When Marines have more questions than answers, Nelson tries to link them with experts in prospective career fields.

"If a guy comes out and says he's a diesel mechanic, I can find him four different jobs in four different towns," Nelson said. However, if someone isn't sure what to do next and wants additional job skills, Nelson frequently points out that the economy makes going to college "a good idea right now."

Marine For Life is about helping Marines find the answers they need as they move into the civilian world, said Sgt. Angel Cardona, who works with Nelson. That doesn't mean the home-

town link is going to "hold their hand," but it does mean the hometown link can point them in the right direction.

"What I encounter a lot is unrealistic expectations," Cardona said. Sometimes Marines getting out of the Corps don't understand the realities of the job market, and Marine For Life can give them the facts and keep them from wasting time searching for something that's out of reach.

On the flip side, Cardona said he doesn't want to see a Marine aim too low. He said he wouldn't want to guide a Marine into a low-paying,

dead-end job. Doing that, Cardona said, would leave him asking himself, "Did I really help him?"

Though the scope of Marine For Life is much broader than finding jobs for Marines, employment is typically the dominant concern for Marines using the program, said Maj. John Christensen, the hometown

link in the Denver area. Christensen said he sometimes feels like a "post-Marine Corps career counselor."

One Marine Christensen helped is Sgt. J.R. Bell, who left active duty in August.

After initially planning to settle in Denver, Bell opted to live in Seattle and sell cars while preparing for a career as a firefighter. Nevertheless, Christensen's help kept Bell at ease when it looked as if he would be making his home in Denver.

Bell said he would recommend Marine For Life to any Marine planning to leave the Corps. "It's a guaranteed safety net." **M**



"Our debt of gratitude extends well beyond their last day of active service."





Island Warriors Go Hot in Shoalwater

By Cpl. Jason E. Miller
SHOALWATER BAY TRAINING AREA, QUEENSLAND, Australia



▲ Lance Cpl. Mike Ackerman, Cpl. Nelson Santiago and Lance Cpl. Aaron Chaney from Charlie Battery, 1st Battalion, 12th Marine Regiment, load a live round into a Howitzer cannon during a combined arms live-fire exercise.

Photo by Cpl. Jason E. Miller

After two weeks in the Australian bush, Marines from 2nd Battalion, 3rd Marine Regiment, 3rd Marine Expeditionary Brigade, finally received the chance to load their weapons with live rounds for the unit's planned combined arms, live-fire exercise here Sept. 23.

The battalion, supported by three companies of mechanized armor from reserve units across the United States and artillery support from Charlie Battery, 1st Bn. 12th Marines, from

Marine Corps Base Kaneohe Bay, Hawaii, set out across the firing ranges of Queensland's Shoalwater Bay training area to add an even deeper sense of realism to the force-on-force exercise during the last two weeks of Exercise Crocodile 2003, Sept. 6–26.

Echo, Golf and Fox companies moved by amphibious assault vehicles, CH-46 Sea Knight helicopters and light armored vehicles toward specified targets acting as enemy forces. Marines fired weapons ranging from M-16s to MK-19 automatic grenade launchers during the exercise.

While Marines often get the chance to use their weapons on ranges in Hawaii, the chance to use them in Australia gave them greater knowledge of their capabilities in a different environment.

"The terrain here is a lot different than we'd encounter at a training area like Pohakuloa Training Area or Schofield (Barracks)," said Capt. Brian Russell, commanding officer of Charlie, 1/12. "Here, there weren't any designated firing points, so we didn't know exactly where everything was going to be before we started."

The exercise started in the early morning and kept the Marines moving for most of the day, traveling from one objective to another, destroying enemy positions along the way.

The 13 Marines who recently joined the battery were able to learn the ropes in their new unit, said Russell. "We're definitely leaving Australia a better unit than we arrived because the training's been so good."

The CALFEX concluded a month-long training evolution for 2/3 in support of Exercise Crocodile 2003. **M**

➤ The M-40A3, the Marine Corps' new sniper rifle, will replace the aged M-40A1 which has been in service since the 1970s. The A3s, like the A1s, are handmade at the Marksmanship Training Unit at MCB Quantico.

Photo by Gunnery Sgt. Matt Hevezi

Marine snipers have a new best friend to replace the old M-40A1 sniper rifle. The new and improved M-40A3 will fully replace the M-40A1 by October 2004.

"Because only 30 rifles are produced every month, with a limited amount of scopes, it'll take a while to fully replace the old rifle," said Staff Sgt. Jesse L. Bier, the project and field officer with 1st Marine Division.

Each rifle is hand-built by precision weapons repairmen at Weapons Training Battalion in Quantico, Va., according to Staff Sgt. James Knight, a sniper section repairman at WTB.

The M-40A3 was tested in 1996 and was finally issued as an official Marine Corps weapon in 2000, Bier said. During the rifle testing, surveys showed shooters enjoyed greater accuracy and increased comfort.

As with the M-40A1, the M-40A3 is a bolt-action, manually operated, magazine-fed, air-cooled, shoulder-fired

New, Improved M-40A3

By Pfc. Khang T. Tran
MARINE CORPS BASE CAMP PENDLETON, Calif



weapon with an optical scope. However, the M-40A3 has an adjustable cheek piece and recoil pad on the butt stock, giving the shooter the chance to position the weapon more comfortably.

It's designed to shoot beyond 1,000 yards, according to Lance Cpl. Gunther Johnston, an armorer with 1st Recon Bn. It uses special 7.62mm M118LR rounds. The M-40A3 uses the rail system, allowing snipers to change out a fixed 10-power scope for an ANPVS-10 night scope.

"Unlike the M-40A1, the M-40A3 has a mount rail like the M-4, which allows you to attach different units to it," said Sgt. Steven D. Lovell, team leader with B Company, 1st Recon Bn. "It's great for patrolling urban areas as well."

The day scope allows a sniper to see up to 800 meters; the night scope allows 600 meters.

The rifle is built on a fiberglass stock with a stainless-steel barrel, a steel floor plate and trigger-guard assembly. The

magazine box holds five rounds.

Additional enhancements include six quick-detach sling swivel mounts and a removable, swivel bipod.

"The M-40A1 has helped the Marine Corps for a long time, but I'm glad we finally improved it," Johnston said.

Still, the new rifle comes with some drawbacks. For one, it's 2 pounds heavier than the old one. The increased weight, though, hasn't hampered the rifle's performance. Johnston said most snipers prefer the M-40A3 because of the upgraded comfort.

But, some shooters still like the old rifle. Sgt. Andrew C. Giermann, a reconnaissance and surveillance instructor with I Marine Expeditionary Force said he'd rather shoot the M-40A1 because it's lighter than the M-40A3, making it much easier to maneuver. But even he admits there are things to like about the rifle, like the bipod that makes it more stable when firing. **M**



"We're definitely leaving Australia a better unit than we arrived."